



Dart Aerospace Ltd.
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D350-636-011
Job Sheet 177747



Part No: D350-636-011

Job Qty: 1 ea

Part Name: Skidtube LH, Std Wearplates, DART (Apical) Cylindrical/Aerazur Float Comp.



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 5/17/18

Job Tracking No:

Due Date: 6/21/18

Created By: Michelle Gagnon-Donovan

Type: SOLD

Description:

Note: D2750-041 REV G SHEETS 1,2,4,8 IPP Rev:I 02.09.25 IPP Rev:J 06-03-23 As per Rev D IPP Rev:K 06-07.13
As per dsi9343 IPP Rev:L 07-07-28 Added SS Wearplates(Rev E) JLM Verf:EC IPP Rev:M 08-04-22 DD
verified:EC IPP Rev:N 08-09-23 revF DD verified:ec IPP Rev:O 09-02-06 per PAR09-010 DD verf:EC IPP
Rev:P 10.06.22 revise seq110 DD verf:EC IPP Rev:Q 10.10.01 as per IIN revH DDverf:EC IPP REV:R
13.08.27 PER ECN13-594 DD VERF:JLM

Ship Via:

Bill of Materials



Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	1 Ea		6/21/18	0.00	0.00	Start Up Skid tubes-1		
110	Skid tubes	1 pcs		6/21/18	0.00	4.55	Skid tubes-4		
120	QC	1 pcs		6/21/18	0.00	0.00	QC10		
130	QC	1 pcs		6/21/18	0.00	0.00	QC5		
140	HandFinish	1 pcs		6/21/18	0.00	0.93	HandFinish1		
150	QC	1 pcs		6/21/18	0.00	0.00	QC7-2		
160	Skid tubes	1 pcs		6/21/18	0.00	4.55	Skid tubes-4		
170	QC	1 pcs		6/21/18	0.00	0.00	QC10		
180	QC	1 pcs		6/21/18	0.00	0.00	QC5		
190	HandFinish	1 pcs		6/21/18	0.00	0.93	HandFinish2		
200	SprayPaint	1 pcs		6/21/18	0.00	0.91	Spray Paint		
205	Outsource	1 pcs		6/21/18			ATE003-VC		
210	QC	1 pcs		6/21/18	0.00	0.00	QC14		
230	HandFinish	1 pcs		6/21/18	0.00	0.93	HandFinish4		
240	QC	1 pcs		6/21/18	0.00	0.00	QC5		
250	Packaging	1 pcs		6/21/18	0.00	0.00	Packaging1-3		
260	QC	1 pcs		6/21/18	0.00	0.00	QC4		
265	DC	1 pcs		6/21/18	0.00	0.00	DC		
270	Packaging	1 pcs		6/21/18	0.00	0.00	Packaging3-1		
280	QC21-FG	1 Ea		6/21/18	0.00	0.00	QC21		

Part Op 110 - 1- Pick D2600-3 Bent 2- Deburr FWD and AFT ends, remove bending marks. Scribe batch# inside AFT end per dwg
 Descriptions: D2750-1 3- Drill pilot holes for blade fitting bolt holes using DT8983. Start with 3/16", then open to 0.500" using center drill then ream holes using 0.500" reamer. PIN first side. Repeat process on second side. ***ENSURE PROPER POSITIONING FWD BEND MUST BE FACING UP WHEN DRILLING FIRST SIDE*** Drill pilot holes as per Dwg D2750 sheet 4 (D2750-1 details). Drill using drill Jig DT8150 & DT8863A for 2nd side only DT8863B for first side (detail B) 4- Locate DT8330 off of blade fitting bolt holes and drill pilot holes for blade fitting. Open to 0.500" using hole saw. VERIFY AND RECORD FWD BEND ANGLE. 5-Drill pilot holes for wearplates as per Dwg D2750 using DT8108 open to 0.297". 6- Open up holes of Detail A to 0.297" (total of 2 holes per side) 7-Weld D2744 Cap as per Dwg D2750 and QSI 004. Fill grooves in bend left from bending as per QSI 004 A/R Aluminum Rod batch: 138834 8-Grind welds flush as per Dwg D2750

160 - 1-Open up holes using hole saw of Detail C and ground handling to 0.625" (total of 8 holes per side) as per dwg D2750. 2-Open up holes using hole saw of Detail B to 0.750" (total of 4 holes per side) as per dwg D2750. 3- Open float hole using un-bit to 0.500" (4 per side) 4-Chamfer holes of Detail B, C, ground handling and float holes per dwg D2750 (welding instructions on sheet 8) 5-Deburr and blow out all chips from inside of tube 6- Prepare tube for welding, remove alodine as required. 7-Bond web D2739 in place as per QSI 015, let cure for 12hrs. A/R Sikaflex-291 batch: 138787 exp. date: 2018/05/25 ATTN: USE I-BEAM LOCATION AID (BLADE FITTING)*** 8- Weld spacers D3490-1 D3490-3 and D2743 as per dwg D2750 & QSI004 (welding instructions on sheet 8) A/R Aluminum Rod batch: 138834 9- At section AJ-AJ drill out x-bolt spacer to 0.404" 10-Grind welds flush as per Dwg D2750 11-Spot face ground handling holes section (total of 4 places per side) as per dwg D2750 12-Deburr holes, ensure tube is free of all scratches before sending to paint.

180 - ***VERIFY C'BOARD IS GOOD***

190 - Re-alodine tube as per QSI 005 section 4.1.2.1 do not acid etch.

200 - 1- PRIME AS PER DWG AND QSI 005 4.2 PRIMER PRC DESOTO 515X349 BATCH: 138862 2- PAINT WHITE AS PER DWG AND QSI 005 4.2 PAINT BATCH: 138863

210 - Inspect for foreign object per QSI 024

230 - 1- Install inserts as per Dwg D2750 2-Inspect for Foreign Objects 3- Install blade fitting D3488-041, wearshoes and ground handling hardware as per dwg D2750 SIKA FLEX 241 BATCH: 11138203 EXP DATE: 18/11 4- Assemble o'ring to plug as per dwg D3492 and apply o'ring lube A/R 55-o'ring lube batch: 11138203 5- Coat all exposed fasteners with "LPS Procyon" batch: 11133690

260 - *****ensure antiseize is on AN8C21A bolts*****

265 - record fwd angle: 89.9 Photocopy blue file and type labels per PPP D350-636-011 CHG 007

270 - Package as per PPP D350-636-011 Location : FG072

00 4212

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
D2600-3-BENT-LH	Extrusion Bent LH	1 Ea (1 ea)	90-Start up Operation	5073819
D2744	Cap	1 Ea (1 ea)	90-Start up Operation	5063692
D2739	350 I-Beam	1 Ea (1 ea)	160-Skidtubes	5049038
D2743	Crossbolt Spacer	8 Ea (8 ea)	160-Skidtubes	5051803
D3490-1	Cross Bolt Spacer	4 Ea (4 ea)	160-Skidtubes	5065863
D3490-3	Cross Bolt Spacer	4 Ea (4 ea)	160-Skidtubes	5066254
AN3C5A	Bolt	34 Ea (34 ea)	230-HandFinish	5057153
AN3C6A	Bolt	4 Ea (4 ea)	230-HandFinish	5076000
AN6C44A	Bolt	4 Ea (4 ea)	230-HandFinish	5006333-1
AN8C35A	Bolt	1 Ea (1 ea)	230-HandFinish	FM1137102
D2745	Bushing	8 Ea (8 ea)	230-HandFinish	5062489
D3488-041	Blade Fitting LH	1 Ea (1 ea)	230-HandFinish	5070258
D3492-1	Plug	8 Ea (8 ea)	230-HandFinish	5077652
D3492-3	Plug	8 Ea (8 ea)	230-HandFinish	5072782
D3535-25	Wearplate Center	1 Ea (1 ea)	230-HandFinish	5080560
D3536-25	Gasket Center	1 Ea (1 ea)	230-HandFinish	5081731
D3537-1	Wearpad	3 Ea (3 ea)	230-HandFinish	5070788
D3631-1	Washer	8 Ea (8 ea)	230-HandFinish	5055407
D3791-1	Wearpad	1 Ea (1 ea)	230-HandFinish	5059894
D3793-1	Wearplate Fwd	1 Ea (1 ea)	230-HandFinish	5070239
D3793-3	Wearplate Aft	1 Ea (1 ea)	230-HandFinish	5072081
D3794-1	Gasket Fwd	1 Ea (1 ea)	230-HandFinish	5059813
D3794-3	Gasket Aft	1 Ea (1 ea)	230-HandFinish	5046513
MS21043-6	Nut	4 Ea (4 ea)	230-HandFinish	5036009
MS21083C8	Nut	1 Ea (1 ea)	230-HandFinish	5050046-1
NAS1149C0332R	Washer	38 Ea (38 ea)	230-HandFinish	5056492
NAS1149C0832R	Washer	1 Ea (1 ea)	230-HandFinish	M138409-R
NAS1515H3L	Washer	4 Ea (4 ea)	230-HandFinish	5036714
NAS1611-010	O-Ring	8 Ea (8 ea)	230-HandFinish	5057658
NAS1611-013	O-Ring	8 Ea (8 ea)	230-HandFinish	5034462
ALS4-1032-225	Rivnut	38 Ea (38 ea)	230-HandFinish	5068130
AN8C21A	Bolt	2 Ea (2 ea)	250-Packaging	FM1137102
D2741	Replacement Blade	1 Ea (1 ea)	250-Packaging	5068565
D3493-1	Washer	2 Ea (2 ea)	250-Packaging	5067105
D3532-1	Spacer	2 Ea (2 ea)	250-Packaging	5062640
MS21083C8	Nut	2 Ea (2 ea)	250-Packaging	5050046
NAS1149D0863J	Washer	2 Ea (2 ea)	250-Packaging	F125635

Job Allocations				
Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	D2600-3-BENT-LH	1	2	0
	D2744	1	86	0
	D2739	1	10	0
160-Skidtubes	D2743	8	86	0
	D3490-1	4	128	0
	D3490-3	4	107	0
	ALS4-1032-225	38	5,405	0
	AN3C5A	34	1,802	0
230-HandFinish	AN3C6A	4	266	0
	AN6C44A	4	351	0
	AN8C35A	1	47	0
	D2745	8	113	0
	D3488-041	1	16	0
	D3492-1	8	88	0
	D3492-3	8	87	0
	D3535-25	1	24	0
	D3536-25	1	31	0
	D3537-1	3	169	0
	D3631-1	8	931	0
	D3791-1	1	36	0
	D3793-1	1	30	0
	D3793-3	1	29	0
	D3794-1	1	55	0
	D3794-3	1	29	0
	MS21043-6	4	200	0
	MS21083C8	1	125	0
	NAS1149C0332R	38	7,418	0
	NAS1149C0832R	1	66	0
	NAS1515H3L	4	199	0
	NAS1611-010	8	569	0
	NAS1611-013	8	365	0
250-Packaging	AN8C21A	2	96	0
	D2741	1	87	0
	D3493-1	2	57	0
	D3532-1	2	40	0
	MS21083C8	2	125	0
	NAS1149D0863J	2	119	0
Part Specifications				
Specifications could not be found.				

Plex 5/17/18 12:27 PM Dart.Gagnon.Michelle

QTY -041	QTY -042	QTY -043	QTY -044	PART NUMBER	DESCRIPTION
X				D2750-041	350 SKIDTUBE ASSEMBLY, LH
	X			D2750-042	350 SKIDTUBE ASSEMBLY, RH
		X		D2750-043	350 SKIDTUBE ASSEMBLY, LH
			X	D2750-044	350 SKIDTUBE ASSEMBLY, RH
1	1	1	1	D2739	WEB
8	8	8	8	D2743	SPACER
1	1	1	1	D2744	CAP
8	8	8	8	D2745	BUSHING
1				D2750-1	SKIDTUBE WELDMENT, LH
	1			D2750-2	SKIDTUBE WELDMENT, RH
		1		D2750-3	SKIDTUBE WELDMENT, LH
			1	D2750-4	SKIDTUBE WELDMENT, RH
1		1		D3488-041	BLADE FITTING, LH
	1		1	D3488-042	BLADE FITTING, RH
4	4	4	4	D3490-1	SPACER
4	4			D3490-3	SPACER
		4	4	D3490-5	SPACER
8	8	8	8	D3492-041	PLUG ASSEMBLY
8	8			D3492-043	PLUG ASSEMBLY
		8	8	D3492-045	PLUG ASSEMBLY
1	1	1	1	D3535-25	WEARSHOE
1	1	1	1	D3536-25	GASKET
3	3	3	3	D3537-1	WEARPAD
8	8	8	8	D3631-1	WASHER
1	1	1	1	D3791-1	WEARPLATE
1	1	1	1	D3793-1	WEARSHOE
1	1	1	1	D3793-3	WEARSHOE
1	1	1	1	D3794-1	GASKET
1	1	1	1	D3794-3	GASKET
38	38	38	38	ALS4-1032-225	INSERT (OR ALS7-1032-225, AKS4-1032-225, AELS-1032-225)
34	34	34	34	AN3C5A	BOLT
4	4	4	4	AN3C8A	BOLT
4	4	4	4	AN6C44A	BOLT
1	1	1	1	AN8C35A	BOLT
38	38	38	38	AN960C10L	WASHER
1	1	1	1	AN960C816L	WASHER
4	4	4	4	MS21043-6	NUT
1	1	1	1	MS21083C8	NUT
4	4	4	4	NAS1515H3L	WASHER

GENERAL NOTES:

- MATERIAL: MAKE D2750-1/-2/-3/-4 FROM D2600-3 EXTRUSION (INITIAL LENGTH = 120.0).
- FINISH: ACID ETCH, ALODINE ASSEMBLY PER DART QSI 005 4.1 PRIOR TO INSTALLING D2739 WEB.
STANDARD: PRIME (REF. 4.2.1.3.3) AND PAINT WHITE PER DART QSI 005 4.2
OPTIONAL: POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT AS INDICATED TO 1.0 ABOVE SKIDTUBE CENTER-LINE PER DART 005 4.4 (OPTIONAL).
- TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- UNITS: INCHES UNLESS OTHERWISE NOTED
- BREAK SHARP EDGES: N/A
- IDENTIFICATION: N/A
- WEIGHT: D2750-041/-042/-043/-044 = 26.5 LBS
- WELD PER DART QSI 004
- INSTALL ALS4-1032-225 INSERTS AFTER FINISH AS INDICATED. DRILL 'F' SIZE HOLES ($\phi 0.297$) FOR WEARSHOE INSERTS
- FINAL CONFIGURATION SHOULD HAVE THE FOLLOWING MINIMUM MECHANICAL PROPERTIES:
MINIMUM YIELD TENSILE STRENGTH = 35 KSI
MINIMUM ULTIMATE TENSILE STRENGTH = 38 KSI
- COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF
FINISH WITH MEK DEGREASER.
- SPACER AND PLUG INSTALLED SAME AS SECTION AJ-AJ EXCEPT HORIZONTAL
- SPACER AND PLUG INSTALLED SAME AS SECTION AP-AP EXCEPT HORIZONTAL

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NO. 177747

MAY 17 2018

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2013-08-13

G	CORRECTED TOLERANCE ON $\phi 0.500$ THRU HOLE: IS $+0.010/-0.000$, WAS $+0.100/-0.000$ (ZN B3-4, B2-5); ADD VIEW TO CONTROL FWD BEND ORIENTATION (ZN D-1-4/-5/-6/-7); UPDATED FINISH OPTIONS; INSIDE OF TUBE NO LONGER SPRAYED WITH LPS-3. REASON: PAR13-276 AND NCR13-2757	MB	13.07.11
F	INCORPORATE DSI 9413; QTY (3) D3537-1 WAS QTY (5) (ZN C8-1); D3791-1/-3 REPLACES D3535-13/-35 (ZN C8-1); D3794-1/-3 REPLACES D3536-13/-35 (ZN B8-1); ADD D3791-1 (ZN C8-1); WEARSHOE HOLES UNDER FWD/AFT SADDLE REMOVED (8 PL). WEARSHOE HARDWARE QTY UPDATED (ZN B8-1); D3488-041/-042 HARDWARE UPDATED (ZN C1-8, 9, 10, 11); ADD NOTE 12 AND 13 (ZN A6-1); REASON: REF. NCR 08-043	PH	08.07.16
E	CHANGE TO STAINLESS STEEL WEARPLATES; ADD RUBBER GASKETS; CHANGE INSERTS: ADD D3631-1; REMOVE QTY (38) NAS1515H3L; REMOVE QTY (10) NAS1515H8L; REMOVE D2741, QTY (2) AN960C816; REMOVE QTY (2) MS21083C8	CB	07.05.17
D	ADD HOLES AND SPACERS FOR APICAL FLOATS; INCORPORATE DEO 9133/9157	PH	08.01.05
C	ADD D2750-3/D2750-4; INCORPORATE D2738 AND D2740	CP	08.11.18
B	CHANGE MS24694-S203 TO AN5-16A	CP	08.09.01
A	NEW ISSUE	DS	08.04.16
REV.	DESCRIPTION	BY	DATE
DESIGN	MM		
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	13.07.11		

DART AEROSPACE USA, INC.

KENT, WA

DRAWING NO.

D2750

REV. G

SHEET 1 OF 11

TITLE

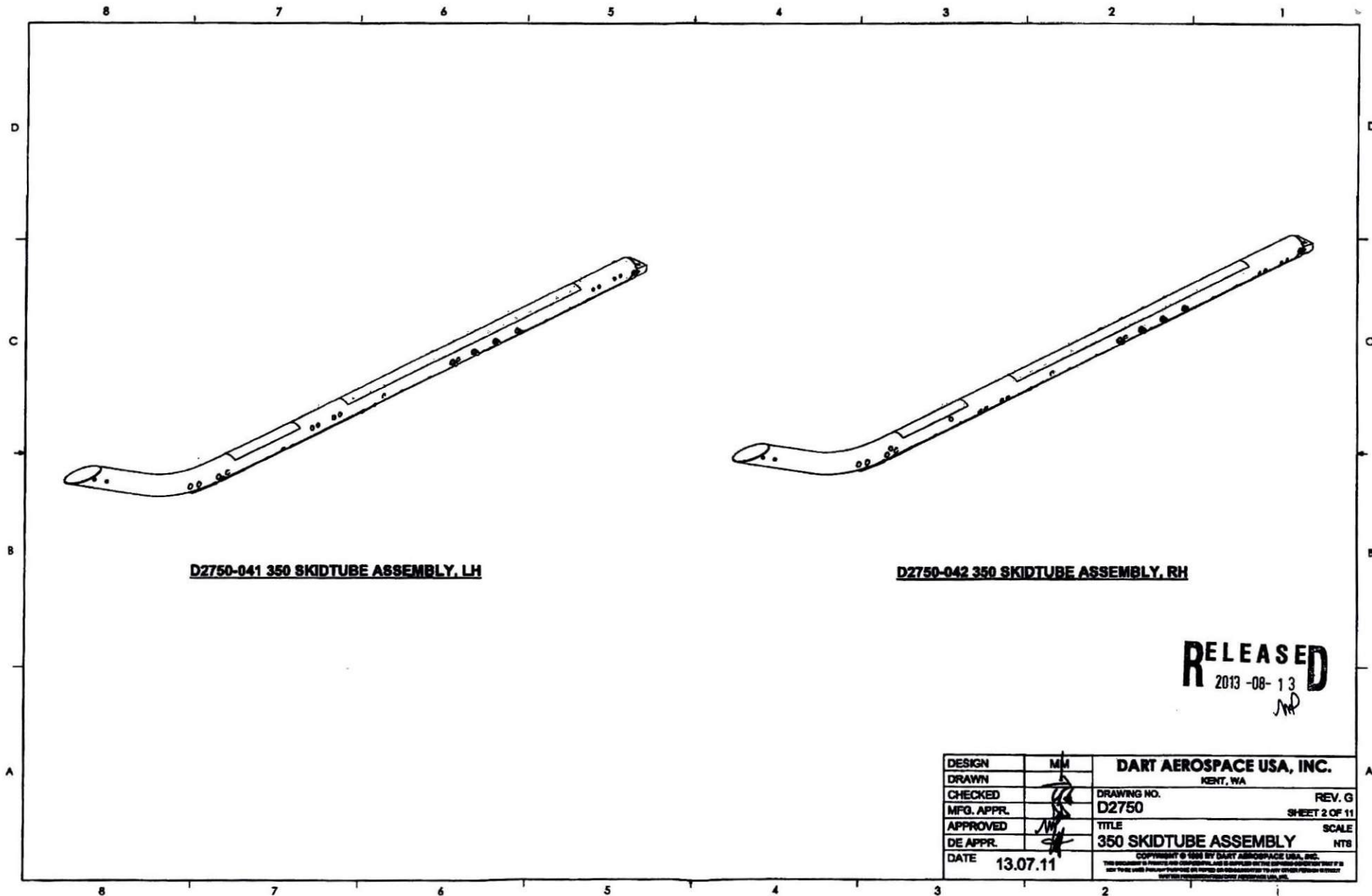
350 SKIDTUBE ASSEMBLY

SCALE

NTS

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DESIGN	MM	DART AEROSPACE USA, INC.	
DRAWN		KENT, WA	
CHECKED		DRAWING NO.	REV. G
MFG. APPR.		D2750	SHEET 2 OF 11
APPROVED		TITLE	SCALE
DE APPR.		350 SKIDTUBE ASSEMBLY	NTB
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